ISOLATION OF *Beauveria* FROM UNIVERSITAS GADJAH MADA SOILS AND ITS SCREENING AGAINST *Aedes aegypti* L. (DIPTERA: CULICIDAE)

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19/440369/BI/10229

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ABSTRACT

Vector-Borne diseases is a major constituent to global diseases which occur from a vector animal. *Aedes aegypti* is responsible for spreading diseases such as dengue fever. To manage the spread of dengue it is necessary to control the population of its vector. A chemical approach for population control has the potential to also affect non-target animals so to mitigate the issue is the implementation of an entomopathogenic fungus. One of these entomopathogenic fungi is the genus *Beauveria* which is a cosmopolitan fungus that lives in the soil. *Beauveria* was isolated by taking soil samples around Universitas Gadjah Mada campus, isolated with selective medium, identified, and cultured. Collection of *Aedes aegypti* eggs was done by using ovitrap, identified, reared, then let reproduce so available as test subjects. The mosquitos were subjected to conidial suspensions of the fungi to see whether it is pathogenic. The mortality was analyzed using the Kaplan-Meier model based on their survivability. Incubation lasts over 10-days. The pathogenic fungus isolates, indicated by its high mortality rates deemed as a potential insecticide against *Aedes aegypti.*

Keywords: *Aedes aegypti, Beauveria,* Entomopathogen, Isolation, Mosquito